



PRODUCT GUIDE

FOG, HAZE & HEAVY FOG



Jem is recognized as one of the leading producers of fog, haze and heavy fog machines in the world. Indeed, Jem products can be found throughout the touring and club markets, and over the years have built up a reputation for unique, reliable products.

Jem offers a complete line of fog, haze and heavy fog machines as well as a broad line of popular fluids. Long established as the king of the road when it comes to the demanding grind of the international touring circuit. Jem products have toured the world with the biggest names in Rock, Pop, Theatre and Stage.

Indispensable complements to today's dance floor lighting effects, Jem Fog machines and hazers have truly earned the term "industry standard".

Martin Professional acquired Jem in 1996, adding its R&D strength and mass production power to the successful Jem mix. Jem is ISO 9001 accredited, an internationally recognized standard of quality in manufacturing and administrative procedure and documentation.

The house of Jem technology

The home of Jem design

Deep in the heart of Lincolnshire, England lies a piece of Denmark. Martin Manufacturing (UK) Plc is the home of Jem Production and Research and Development. ISO 9001 accredited, its layout and design follow the same strict principles, which have made Martin's Danish factory the envy of the industry. With a dedicated workforce of 50 employees and a manufacturing and warehousing facility covering almost 3000m², more than 1500 fog and haze products, along with over 180,000 liter of fluids, are shipped each month.

Martin Manufacturing Plc houses a state-of-the-art, computerized fluid plant as well as its own aluminium diacasting plant. All of our ECO-Mass and High-mass vaporizing chambers are not only cast in-house, but the highly equipped tool shop manufactures all the company's casting dies as well.

All production, design and logistic processes follow the company's strict ISO 9001 quality procedures. This includes a strict quality control stage in which every Jem machine is tested. But it doesn't stop here. Of all tested products, 10% must pass an additional quality inspection by the Quality Manager before being packed.

Service

The attention to service begins at the product's development stage, as every effect generator is designed with ease of service in mind. Many of the models in the range use standard components so that spare part ordering is quick and efficient. When help is needed however, it is never far away with 24-hour service hot-line (+45 70 200 201) and Jem website (www.jemsmoke.com). Furthermore, specialist service is always available from a qualified Jem Service Technician.

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FOG, HAZE AND HEAVY FOG

Jem atmospheric effects are designed to offer varying densities of airborne particulate, from fine optically transparent effects for highlighting subtle hues, to high density fogs for scattering deep saturated color washes.

Fog

The range of fog machines is perhaps the most famous in the world. The ZR models are widely used by major entertainment venues and studios where an instant effect is needed, on cue, every time. With a wide range of complementing water-based fog fluids to choose from, everyone - from major outdoor productions implementing the Roadie "X-Stream" to a DJ using Magnum 550 - can enjoy safe, dry, dense white clouds of odor free fog.

Haze

The range of hazers produce the perfect environment with a precision mixing of air and water-based particles with a good index of refraction. Our hazer technology is ideal for beam projection (mid air effects) or in a studio environment for adding diffusion to sharp scenic angles. Meticulous research and development has been carried out to ensure that a residue-free environment is maintained.

Heavy Fog

One of the most dramatic effects created is that of a low, ground-hugging fog. Jem is the only company to have developed effective heavy fog machines that do not rely on pressurized cylinders or Dewar vessels. Nor is there a need for gallons of boiling water and Dry-Ice. Jem Heavy Fog is created by simply plugging the machine into a power outlet. And because Jem Heavy Fog is chilled, the fog lies low and can even be ducted. The special formulated Heavy Fog fluid ensures that the fog effect evaporates before it warms and rises, and is guaranteed to leave floors and stages dry.



INTRODUCTION TO EFFECTOLOGY

The Jem name is synonymous with atmospheric effects technology - effectology - having produced numerous award-winning products over the last 20 years. In more recent years, we have seen the evolution of a remarkable synergy between Jem innovation and Martin production expertise, which has resulted in the most comprehensive range of effects generating equipment and fluids available.

Jem understands the very specific needs of today's leading Lighting Designers. The precision CMY color mixing and constant beam field illumination of today's most sophisticated lighting products demands the perfect atmospheric ambience. The philosophy is simple. The LD is the "artist" and Jem simply provides the safe, high quality "canvas" on which to display his or her work.

Yet generating an effect is only "half the story". Distributing the effect to the point of the action is also an important part of successful effectology. For this reason, Jem produces a range of support hardware such as ducting adapters, ducting tubes and DMX controllable fans.

Jem products are much sought after in industry and defense establishments as well. Applications may vary from monitoring airflow on wind tunnels to filling aircraft cabin simulators for evacuation training to providing safe smoke for fire fighter training. More recently, Jem has developed a special fog generating technology associated with a range of security products.

Furthermore, Jem is ISO 9001 accredited, an internationally recognized standard of quality in manufacturing, administrative procedure and documentation.





JEM

Jem is recognized as one of the leading producers of fog, haze and heavy fog machines in the world. Indeed unique and reliable products.

Jem offers a complete line of fog, haze and heavy fog machines as well as a broad line of popular fluids. Long established as the king of the road when it comes to the demanding grind of the international touring circuit, Jem products have toured the world with the biggest names in Rock, Pop, Theatre and Stage.

Indispensable complements to today's dance floor lighting effects, Jem Fog machines and hazers have truly earned the term "industry standard".

Heavy Fog:

- GLACIATOR X-STREAM

Haze:

- ZR24/7 HAZER

Fog:

- ROADIE X-STREAM
- HYDRA
- ZR33 HI-MASS
- ZR12 DMX
- ZR12 AL

GLACIATOR X-STREAM

#92210500, 230V, 50Hz

#92210501, 208V, 60Hz

Glaciator X-Stream: The last word in heavy fog

The Glaciator X-Stream from Jem brings you a total, ground fog effect solution in a self-contained unit. Dispensing with the cost and logistical mess of dry ice and CO₂, the Glaciator X-Stream utilizes the simple but immensely effective Jem heavy fog fluids and a radically advanced, closed loop refrigeration system: bringing you an all terrain, all applicable heavy fog solution.

The Glaciator X-Stream houses a remarkably powerful compressor, allowing colossal fog output levels. And because of its advanced, electronically controlled expansion valve, it has a rapid freeze down time and a fast recovery when fired. This means the Glaciator X-Stream runs continuously, - almost infinitely, with a cool ease.

Its chassis design, with two high velocity fans and smart-flow ventilation, also keeps the Glaciator X-Stream ticking in environments of high ambient temperatures. And keeping an eye on internal components is done with an unparalleled simplicity using the Glaciator X-Stream's Internal Diagnostic Assistance.

Featuring a Power Save System when passive, the Glaciator X-Stream is conscientiously efficient with energy and sound, and its cooling fans have a low noise operation when idle, benefiting theatrical and studio applications.

The Glaciator X-Stream also has the option of an external fluid supply: allowing voluminous levels of heavy fog fluid to be stored up to 100 meters away from the unit and at a depression of up to 6 meters.

Where silence is golden and space is rare, the Glaciator X-Stream's remote ducting system allows you to place the unit up to 10 meters away from its application area, A great solution, the remote access system does not in any way compromise the Glaciator's X-Stream fog output density!



Live video: www.jemsmoke.com

HEAT EXCHANGER

- 3,500W
- Wide bore steel vaporizing coil
- DTPD over-temperature protection
- Electronic temperature control using thermocouple
- Approximate time to reach operating temperature = 15 minutes

EFFECT COVERAGE

- Coverage area - 80 square meters
- Operational time: Continuous (at lower out-put)

REFRIGERATION SYSTEM

- 1hp LBP Electrolux compressor (34cc)
- 2.9KW duty under normal operating conditions
- Max ambient operating temperature 35°C (95°F)
- Ideal ambient temperature <25°C (-13°F)
- Refrigerant is R404a (1.2Kg)
- Two speed condenser fans (radial blowers)
- Condenser capacity 4KW under normal operating conditions
- Refrigerant flow control via pulse modulated expansion valve
- Idle mode allows system to shut down when not under load

CONTROL

- DMX512 (3 pin)
- 2 x LED displays with 4 button keypad
- Output level control from 0 to 20 for Fog
- Evaporator fan control via density setting
- Individual switches for Fog, Standby, Ice, Timer
- Timer range:
Delay time (toF)
0 seconds - 90 seconds
Run time (ton)
0 seconds - 90 seconds
- Control panel settings allow for higher fan speeds when using ducting

ELECTRICAL

- Input voltage 230V, 50Hz single phase (32A supply)
- Input power (max) 4.893KW @ 230V
- Input voltage 208V, 60Hz single phase (32A supply)
- Input power (max) 4.325 KW @ 208V
- Power connection is via 32A 3 pin appliance inlet

MEASUREMENTS

- Size: (L x W x H)
866 x 638 x 725 mm
(34.1 x 25.1 x 28.5 in)
- Weight: 110kg (242 lb)

FLUID SYSTEM

- Electronic low fluid detection on internal supply
- 5L fluid container
- Maximum fluid consumption 120ml/minute (B2)
- Internal 5L fluid reservoir with sensor
- External fluid input for remote fluid operation (via internal/external selection switch)
- Failsafe sensor-less (indirect) fluid sensing to protect pumping components

RECOMMENDED FLUIDS

Check Fog Fluid Matrix, page 34-35

ACCESSORIES

- Glaciator X-Stream twin ducting system (#92625007)
- Supports proportional output control using JEM Multifunction Remote (analogue type) (#92765013)
- Fluid drain pipe kit (#92620004)

ZR24/7 HAZER

#92225500, 230V, 50Hz

#92225600, 115V, 60Hz

The award winning ZR 24/7 provides professionals with a perfect canvas of light-enhancing haze. Designed as a high-precision DMX haze generator and the first in a new range, it offers the latest in reliable digital PCB technology. A high-velocity radial blower combines with an innovative ECO-Mass vaporizing system to produce very small, highly refractive airborne particles that form optically translucent haze. A Variable Geometry Airflow (VGA) system is there to allow users to adjust the angle of haze output.

The compact and rugged design makes the ZR 24/7 the perfect tool for all professional applications ranging from stage and television to large-scale clubs and tours - any event where a truly reliable hazer is needed to create a translucent canvas of water-based haze for long periods.

The 3-digit LED user interface and state-of-the-art electronics give you complete access to DMX set-up, density and output control, allowing you the choice of either continuous operation or precision digital timing. The ZR 24/7 has DMX on-board featuring both 3 and 5 pin XLR's. DMX uses two channels; one for fan speed (haze density), and the other for output control. The variable temperature control allows you to use different Jem fluids for different effects.



Optional

Live video: www.jemsmoke.com

HEAT EXCHANGER

- 900W
- Wide bore steel vaporizing coil
- Non-resettable over-temperature protection
- Electronic temperature control using thermocouple
- Heat up time: 2 minutes

EFFECT COVERAGE

- Airflow inclination can be set in the range 0 to 60 degrees
- Coverage volume: 2000 cubic meters
- Operational time: Continuous

CONTROL

- LED display
- Output level control (0 to 20)
- Fan speed control (0 to 20)
- Timer range:
 - Delay time (toF)
 - 0 seconds - 90 seconds
 - Run time (ton)
 - 0 seconds - 90 seconds
- DMX512, 2 channels (3 and 5 pin XLR)
- Digital Machine to Machine link

ELECTRICAL

- Input voltage 200V - 250Vac
- Input power (max) 975W @ 230V
- Input voltage 100 - 130Vac
- Input power (max) 975W @ 115V
- Frequency 50/60Hz both models

MEASUREMENTS

- Size: (L x W x H)
 - 420 x 246 x 303 mm
 - (16.5 x 9.6 x 11.9 in)
- Weight: 11kg (24.2 lbs)

FLUID SYSTEM

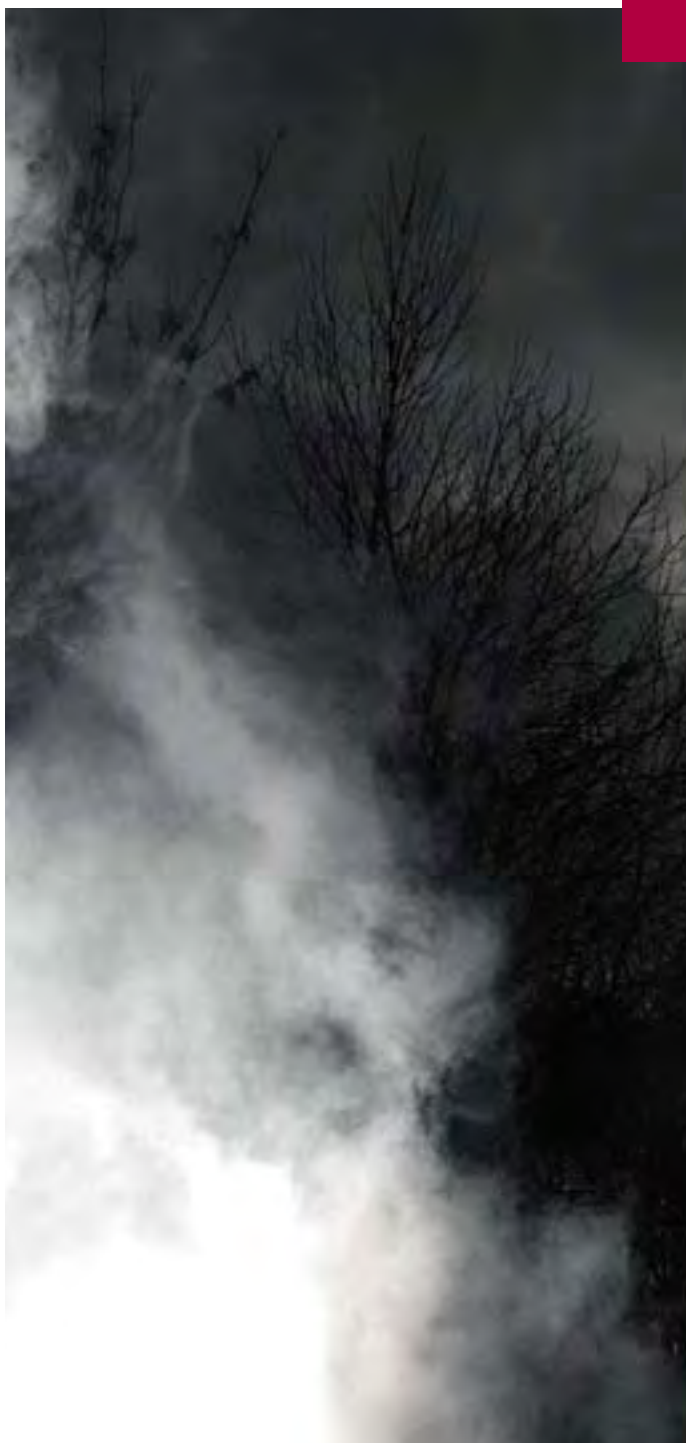
- Electronic low fluid detection
- 2.5L fluid container
- Maximum fluid consumption 410ml/hour (Haze fluid, HOT=Lo)

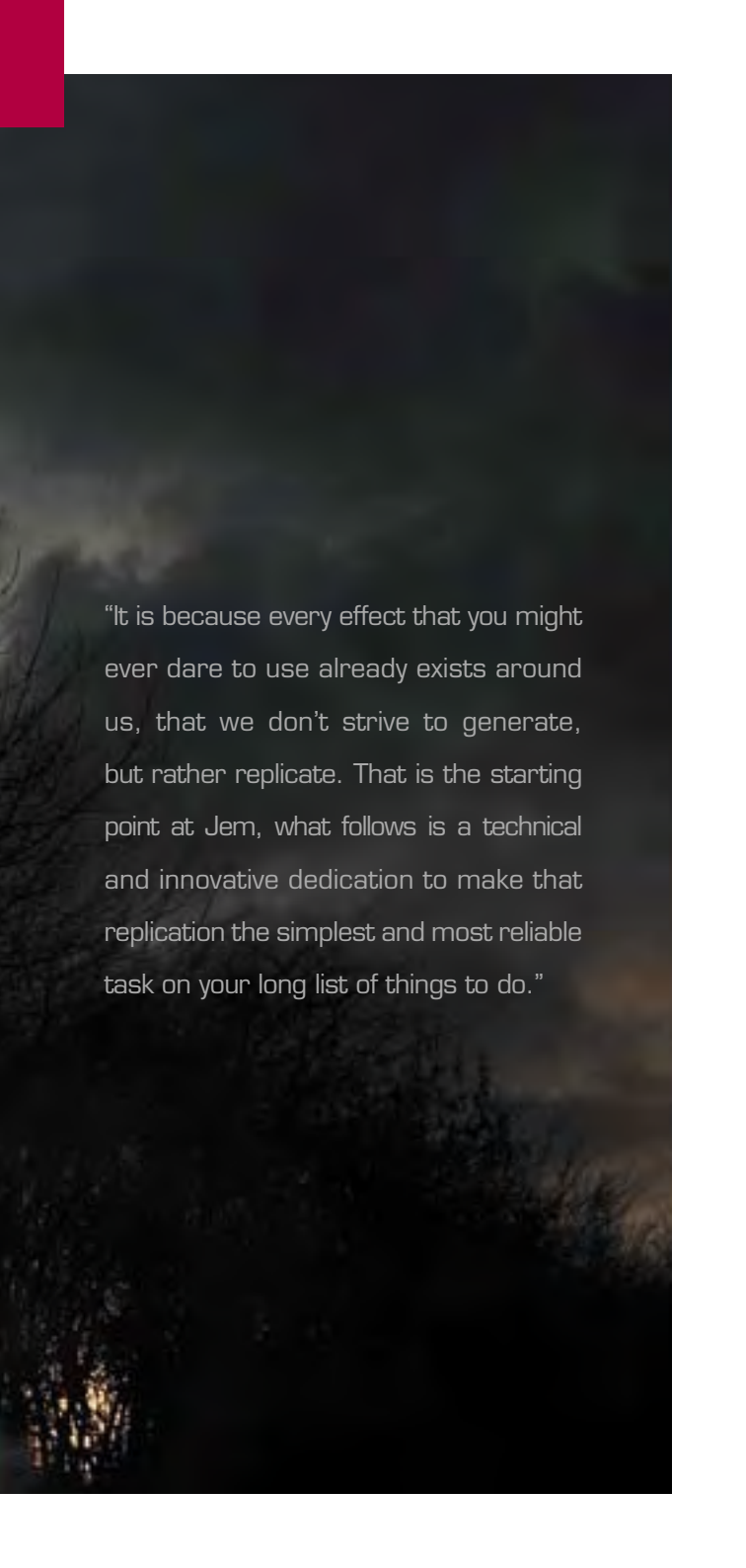
RECOMMENDED FLUIDS

Check Fog Fluid Matrix, page 34-35

ACCESSORIES

- Digital remote (#92765026)





"It is because every effect that you might ever dare to use already exists around us, that we don't strive to generate, but rather replicate. That is the starting point at Jem, what follows is a technical and innovative dedication to make that replication the simplest and most reliable task on your long list of things to do."

ROADIE X-STREAM

#92230400

The Roadie X-Stream is the most versatile professional atmospheric effects generator available today. By incorporating Jem's, X-Stream Airflow System, the Roadie X-Stream blends fog and air to produce a variety of effects; from an optically translucent haze to an immensely dense "white-out" of fog.

The Roadie X-Stream has been designed to deal with the excessive rigors of touring, with a rigid chassis, protected on all eight corners by 20mm aluminum plates, and 40mm lifting bars. The outer casing and control panel also offer a degree of protection in poor weather conditions, making the Roadie X-Stream ideal for large outdoor stadium events. Overheat protection is also guaranteed through a unique, Direct Thermal Protection device.

The fog particulate is constant but can be diluted by increasing the airflow; transforming a dense fog into a light translucent haze, giving the right enhancement to high tech lighting. The Roadie is equipped with two large 2.5kW Hi-Mass Vaporizing Chambers, each with a twin, wide-bore, steel helicoil.

The Roadie X-Stream is fed by a massive 19-liter (5 US gallons) capacity and may be operated from a dedicated on-board, weather resistant control panel or an external DMX 512 source.

Basic control is also possible via the Roadie X-Stream's remote (optional), allowing the machine to be fired at preset levels. A bank of four "shortcut" presets is featured for those wishing to get the Roadie X-Stream into action quickly.



Live video: www.jemsmoke.com

HEAT EXCHANGER

- 2 x 2,500W
- Heat up time: 18 minutes
- Overheat protection: DTPD, Direct Thermal Protection Device

EFFECT COVERAGE

- Operational time: Continuous (at reduced output)
- Approx. fog output: 5,000 cubic meters/min

CONTROL

- DMX512, (3 pin)
- Remote connection: 3 Pin XLR

ELECTRICAL

- Power consumption: 22.5A @ 220V

MEASUREMENTS

- Size: (L x W x H)
1140 x 645 x 655 mm
(45.6 x 25.8 x 26.2 in)
- Weight: 167kg (367 lbs)

FLUID SYSTEM

- Fluid capacity: 2 x 9.5 liter bottles
- Fluid consumption: 500ml/min

RECOMMENDED FLUIDS

Check Fog Fluid Matrix, page 34-35

ACCESSORIES

- Roadie X-Stream remote (#92765025)
- AF-1 fan (#92615000, 230V & #92615100, 115V)
- AF-2 fan (#92615300, 230V & #92615400, 115V)

HYDRA

#92250200 HYDRA base, 230V

#92250300 HYDRA base, 115V

#92250400 HYDRA head, 230V

#92250500 HYDRA head, 115V

Jem Hydra - The multi-headed fog generator

Sixteen heads are better than one

This brilliant new multiple headed fog system from Jem allows you total flexibility in fog placement through up to 16 heads, serviced by one centralized base.

Heads can be placed up to an amazing 120m (393.7 ft) from the base unit and fired on demand through a full range of outputs - from gentle haze to a blindingly dense fog. Every effect for each and every moment.

The heads are fed fluid from the base and can be individually synchronized into waves of different outputs and effects or brought together for a single, monstrous fog burst.

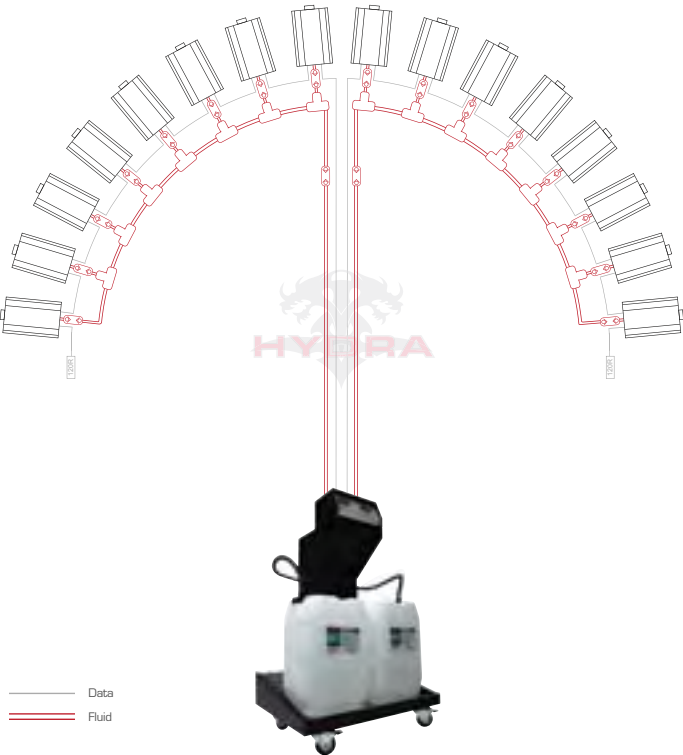
The Hydra is fully DMX controllable from any DMX desk, while the temperature of the heads can be set directly from the centralized base to control dispersion rate. The base also monitors each head for total safety.

Cleaning the units could not be simpler with a Service Mode that flushes clean the system ensuring pure, even firing every time.

The Hydra is an ideal tool for club environments, being able to feed a range of spaces with different outputs, but its true application resumé is endless: from theme parks to musicals, theatres and world tours.



The Hydra's centralized base is the heart of the new dimension in fog design. It is the backbone that enables you to use the system for creating waves of effect, or simply for placing fog in areas normally too difficult or impossible to reach. Being the "brain" behind the Hydra system, the base monitors the entire system and makes sure that each individual head is ready to fire at any time.



Self seal connector

Using the Hydra for touring applications these connectors enable you to transport the system with the fluid line primed. This allows for easy and fast set-up at the next location.



T-connector

Connects the individual Hydra heads to the main "pipeline".



Hydra head

Compact and sleek rugged design with full mounting flexibility.



FLUID SYSTEM

Base Unit:

- Low pressure pump in Base Unit, maintains a constant 2.5 bar pressure in the fluid pipe supplying the heads, independent of the number of heads turned on.
- Maximum head fluid consumption 120mL/minute (Pro Smoke Super).
- The system is factory calibrated for different types of fluid.
- A new mode for cleaning fluid can be used.
- Automatic leak detection.

Heads:

- Standard pump (EP5), increases the 2.5 bar inlet pressure to 16 bar.
- Valve ensures no fluid "puffs" out after firing.
- Maximum installed height above base unit is 20m (65.6 feet) for a maximum fluid pipe run of 60m (196.8 feet) from the base unit (assumes 10mm (0.39 inch) o/d tube).
Longer runs are possible if the height is reduced, up to a maximum of 120m (393.7 feet).

With a central base unit, heads can be 240m (787.4 feet) apart at most (for 0m height above base unit).

REMOTE CONTROL OPTIONS

Base Unit:

- DMX512 decoder:
- Required channels = number of heads
- Output is proportional for all levels above 12%
- Channels supported = 1 to 511
- Valid start codes = 0 (dimmer data only)
- Full framing error detection implemented
- 2 x LED displays with 4 button keypad.
- DMX settings, warnings, cleaning mode.
- Use 2518 controller as remote for non-DMX installations.
- Digital remote for limited control.
- Both 3 and 5 pin DMX connections are provided.

Heads:

- Serial multi-drop RS485 data link, with 16 unit addresses and master slave protocol for command and status.
- The output of each head can be controlled individually and independently (1 DMX channel/head) via DMX input to the base unit.



HEAT EXCHANGER

- Wide bore steel vaporizing coil
- DTP over-temperature protection
- Electronic temperature control using thermocouple
- Approximate time to reach operating temperature
= 9 minutes (EU)
12 minutes (US)

ELECTRONICS SPECIFICATION

Base Unit:

- 2 x Digi-PCB with display unit for DMX addressing and error reporting
- Power PCB for pump control etc.

Heads:

- Digi-PCB with power board.
- Addressing via 16 way rotary (hex coded) switch

POWER REQUIREMENTS

Base Unit:

- Input power (max):
0.25KW @ 230V
0.25KW @ 115V
- 50/60 Hz operation on either voltage
- Current (max) EU 1.1A, US 2.2A
- Power connection is via IEC connector

Heads:

- Input power (max):
1.5 KW EU @ 230V
1.2KW US @ 115V
- 50/60 Hz operation on either voltage
- Current (max) EU 6.5A, US 10.4A
- Power connection is hard wired.

DIMENSIONS

Base Unit:

- Size: 664x510x939 (LxBxH)
(26x20x37 inch)
- Weight: 35Kg (77 lbs)
(including 2 x 25L drums [empty])

Heads:

- Size: 440x392x167 (LxBxH)
(17x15x6.5 inch)
with bracket horizontal
- Weight: 13.8Kg (30 lbs)



ZR33 HI-MASS

#92215200, 230V

#92215201, 120V

The ZR33 Hi-Mass combines a unique range of features to create a powerful fog machine capable of supplying the very best in atmospheric effects.

The ZR33 Hi-Mass is designed to generate instant atmosphere in large clubs, major stage productions and industrial applications.

The Hi-Mass Vaporizing System guarantees even more output for longer periods, while maximum efficiency is still achieved, requiring only 1500 watts to produce a massive 1000 cubic meters of dense fog per minute. A 9.5 liter container ensures long operational periods without refilling.

The ultimate in control options is available with DMX 512 as standard. An on-board remote is also included offering auto timer function extendable by the 8x-mode function. The smooth 0 - 100% fog output allows precision atmospheric control. This, coupled with the Analogue Link facility, permits multi-machine control from a single Jem Multifunctional Controller.

In addition, a heavy-duty hanging bracket is fitted as standard to facilitate easy installation in any type of venue.



ZR33 Hi-Mass	
HEAT EXCHANGER	<ul style="list-style-type: none">• 1,500W Hi-Mass Vaporizing System• Heat-up Time: 7 minutes• Overheat Protection: DTPD (Direct Thermal Protection Device)
EFFECT COVERAGE	<ul style="list-style-type: none">• 1,000 cubic meters/min• Operational time: Continuous (at reduced out-put)
CONTROL	<ul style="list-style-type: none">• DMX input: Single Channel 3 pin XLR and Link• Fog Control: On-board Multifunctional Timer Remote with level control• Analogue Link: for multi-machine connection controlled from one remote
ELECTRICAL	<ul style="list-style-type: none">• Power consumption: 7.0A @ 240V 14.0A @ 120V
MEASUREMENTS	<ul style="list-style-type: none">• Size: (LxWxH): 685 x 345 x 225 mm (27 x 13.6 x 8.5 in)• Weight: 19 kg (41.8 lbs)
FLUID SYSTEM	<ul style="list-style-type: none">• Fluid capacity: 9.5 liter container• Fluid consumption: 150 ml/min
RECOMMENDED FLUIDS	<ul style="list-style-type: none">• Check Fog Fluid Matrix, page 34-35
ACCESSORIES	<ul style="list-style-type: none">• ZR ducting system incl. 5 m of 102 mm diameter ducting (#92625005)• AF-1 fan (#92615000, 230V) (#92615100, 115V)

ZR12 AL & DMX

(AL) #92215100, 240V
(AL) #92215101, 240V

(DMX) #92215110, 240V
(DMX) #92215111, 120V

The ZR12 brothers are mid-sized, portable fog machines with enhanced output to provide a continuous flow of dry dense fog.

Distinguished from each other by their features of control, the ZR12 AL uses a multifunctional remote, while the ZR12 DMX has added DMX input for extra flexibility and control. These individual command features allow you to equip yourself with the right tool for the right job.

The ZR12 DMX can be programmed into any DMX controller and easily incorporated into any light show design. Additionally, the DMX interface features a test fire button that enables operation without the DMX connection. The ZR12 AL provides an economical solution with a built in remote for easy command access.

The ZR12 AL and ZR12 DMX are extremely quick to heat up, meaning greater control of fog when you want it.

Both the ZR12 AL and ZR12 DMX are suited for a wide variety of applications. From rental to theatres, TV studios and clubs.

Create a greater accuracy of fog placement with the ZR ducting system. Available as an accessory to the whole ZR family, the ducting extension ensures uniformity and coverage in any environment.



ZR12 AL	ZR12 DMX
<ul style="list-style-type: none">• 1,000W• Heat-up Time: 7 minutes• Overheat Protection: DTPD (Direct Thermal Protection Device)• 500 cubic meters/min• Operational time: Continuous (at lower out-put)• Remote Socket: 5 pin DIN• Analogue Link: 5 pin DIN• Remote Cable: 5 core, 5 m• Auto Timer Minimum Settings 2 second operation, 1 second delay• Power consumption: 4.5A @ 220V 9.5A @ 110V• Size: (LxWxH): 500 x 225 x 165 mm (20 x 9 x 6.6 in)• Weight: 11 kg (24.2 lbs)• Fluid capacity: 2.5 liter container• Fluid consumption: 75 ml/min• Check Fog Fluid Matrix, page 34-35• Accepts the standard ZR ducting system (#92625004)• DMX interface (#92765015)• AF-1 fan (#92615000, 230V) (#92615100, 115V)	<ul style="list-style-type: none">• 1,000W• Heat-up Time: 7 minutes• Overheat Protection: DTPD (Direct Thermal Protection Device)• 500 cubic meters/min• Operational time: Continuous (at lower out-put)• DMX input: Single Channel 3 pin XLR• Analogue Link: 5 pin DIN• Power consumption: 4.5A @ 220V 9.5A @ 110V• Size: (LxWxH): 500 x 225 x 165 mm (20 x 9 x 6.6 in)• Weight: 11 kg (24.2 lbs)• Fluid capacity: 2.5 liter container• Fluid consumption: 75 ml/min• Check Fog Fluid Matrix, page 34-35• Accepts the standard ZR ducting system (#92625004)• Jem Multifunctional Auto-Timer Remote (analogue) (#92765002)• AF-1 fan (#92615000, 230V) (#92615100, 115V)



MARTIN MAGNUM

Today's advanced effects require a perfect atmospheric backdrop. As a conscientious manufacturer of effect lighting, Martin understands that special need. That's why we have developed a range of atmospheric effects, dedicated to the specific needs of DJs and nightclubs.

Magnum is a complete range of fog and haze solutions for nightclubs and DJs, which allows users to fine tune the atmosphere to exploit the best from their lights. The philosophy is simple. If the LD is the artist and the lights are the paints, Magnum provides the safe, high-quality canvas on which to display your work.

Haze:

- MAGNUM HAZER

Fog:

- MAGNUM CLUB SMOKE
- MAGNUM 2000
- MAGNUM 1500
- MAGNUM 800
- MAGNUM 550

MAGNUM HAZER

#92225700, 230V

#92225800, 115V

Magnum Hazer: Adding depth and dimension to your light show

The Magnum Hazer gives your light show outstanding refraction with an effortless ease. Incorporating some of the most complex technology behind the simplest interface, the Magnum Hazer is one of the most effective, mid-sized haze solutions available today.

With DMX as standard, the Hazer comes with an elementary analogue control panel and an optional digital remote. It also features new technology in the digital calibration of its electronic system - leaving technical adjustments to its on-board software.

To ensure an even haze dispersal every time and in any environment, the Magnum Hazer uses a VGA system, (Variable Geometry Airflow), adjusting the airflow inclination between 0° and 60°. An Auto-fan mode also adjusts the powerful, radial fan's output to achieve a consistent vertical distribution of your effect, guaranteeing a uniform canopy of haze.

The Magnum Hazer comes complete with all the technical excellence you can expect from the Magnum range. It has potential for continuous operation and an electronic low fluid detection system to ensure safety when you do.



HEAT EXCHANGER

- 900W
- Wide bore steel vaporizing coil
- Non-resettable over-temperature protection
- Electronic temperature control using thermocouple
- Heat up time: 2 minutes

EFFECT COVERAGE

- Airflow inclination can be set in the range 0 to 60 degrees
- Coverage volume: 2000 cubic meters

CONTROL

- DMX512 (3 pin)
- Analogue controls for:
 - Output level, from 0 to 10
 - Fan speed, from 0 to 10
- Timer range: Repeat time of 2 minutes (fixed)
 - Run time (ton)
 - 0 seconds - 90 seconds
- The run time is set using the DMX dipswitch, giving a resolution of 10 seconds

ELECTRICAL

- Input voltage 200V - 250Vac
 - 975W @ 230V
- Input voltage 100 - 130Vac
 - 975W @ 115V
- Frequency 50/60Hz both models

MEASUREMENTS

- Size: (L x W x H)
 - 420 x 246 x 303 mm
 - (16.5 x 9.6 x 11.9 in)
- Weight: 11kg (24.2 lbs)

FLUID SYSTEM

- Electronic low fluid detection
- 2.5L fluid container
- Maximum fluid consumption
 - 410ml/hour

RECOMMENDED FLUIDS

Check Fog Fluid Matrix, page 34-35

ACCESSORIES

- Digital remote (#92765026)

MAGNUM CLUB SMOKE

#92250000 Club Smoke base, 240V

#92250100 Club Smoke base, 110V

#92620000 2 heads for CS, 220/240V

#92620001 2 heads for CS, 110/120V

The Magnum Club Smoke is a two head fog package with "ground-based" fluid supply specifically designed for club installations. This special fog delivery system blends into any club decor with the compact fog heads continually delivering a high volume of dense white fog.

The Magnum Club Smoke comes complete with a convenient wall mounted Club Smoke Service Module housing a 10 liter "ground-based" fluid supply. The Service Module can be installed up to 100 meters from the heads for easy mid-evening refills. No more high-wire fluid refills! Additionally, all fluid line, signal and main connections enter the Service Module from the top for added convenience.

Reliable and easy to maintain, the Club Smoke includes an electronic low fluid sensing system - no more costly pump burn-outs! Other great features include DMX input and auto timer remote; floor, wall or ceiling mounting; light weight and compactness; and easy installation and maintenance. The system also comes supplied with a sturdy "U" bracket which allows the head to be mounted at any angle.

The Magnum Club Smoke is available with two extra heads for added coverage. The Analogue Link socket in each fog head may also be used for connection of the AF-1 DMX Fan - a useful means of expansion when a venue requires perfect fog distribution. All heads are supplied with drip trays.



HEAT EXCHANGER

- 1,000W (each head)
- Heat up time: 7 minutes

EFFECT COVERAGE

- 2 x 500 cubic meters/min (2 heads)
- Operational time: Continuous (at lower out-put)

CONTROL

- Input: Connecting 3 pin XLR
- Overheat Protection by DTP Device
- DMX Input: 3 pin XLR
- DMX Link: 3 pin XLR
- Signal Out (to Heads) 2 x 3 pin XLR
- Remote Input: 3 pin XLR
- Remote Control Auto Timer with separate operate and delay controls, plus variable output

ELECTRICAL

- Power Consumption:
- 4.5A @ 220V (each head)
1A@ 220V (service module)
- 9.09A@ 120V (each head)
- 1.36A@ 120V (service module)

MEASUREMENTS

- Service Module, size:
(L x W x H)
410 x 480 x 290 mm
(16.1 x 18.9 x 11.4 in)
- Head (one), size:
(L x W x H)
330 x 310 x 165 mm
(13 x 12.2 x 6.5 in)
- Service Module, weight:
12 kg (26.4 lbs)
- Head (one), weight:
10 kg (22 lbs)

FLUID SYSTEM

- Fluid consumption: 100ml per min per head
- Fluid outlets: 2 x 6mm push in fittings
- Electronic Low Fluid Cut Off
- Fluid capacity: 10 liter plastic container

RECOMMENDED FLUIDS

Check Fog Fluid Matrix, page 34-35

MAGNUM CLUB SMOKE

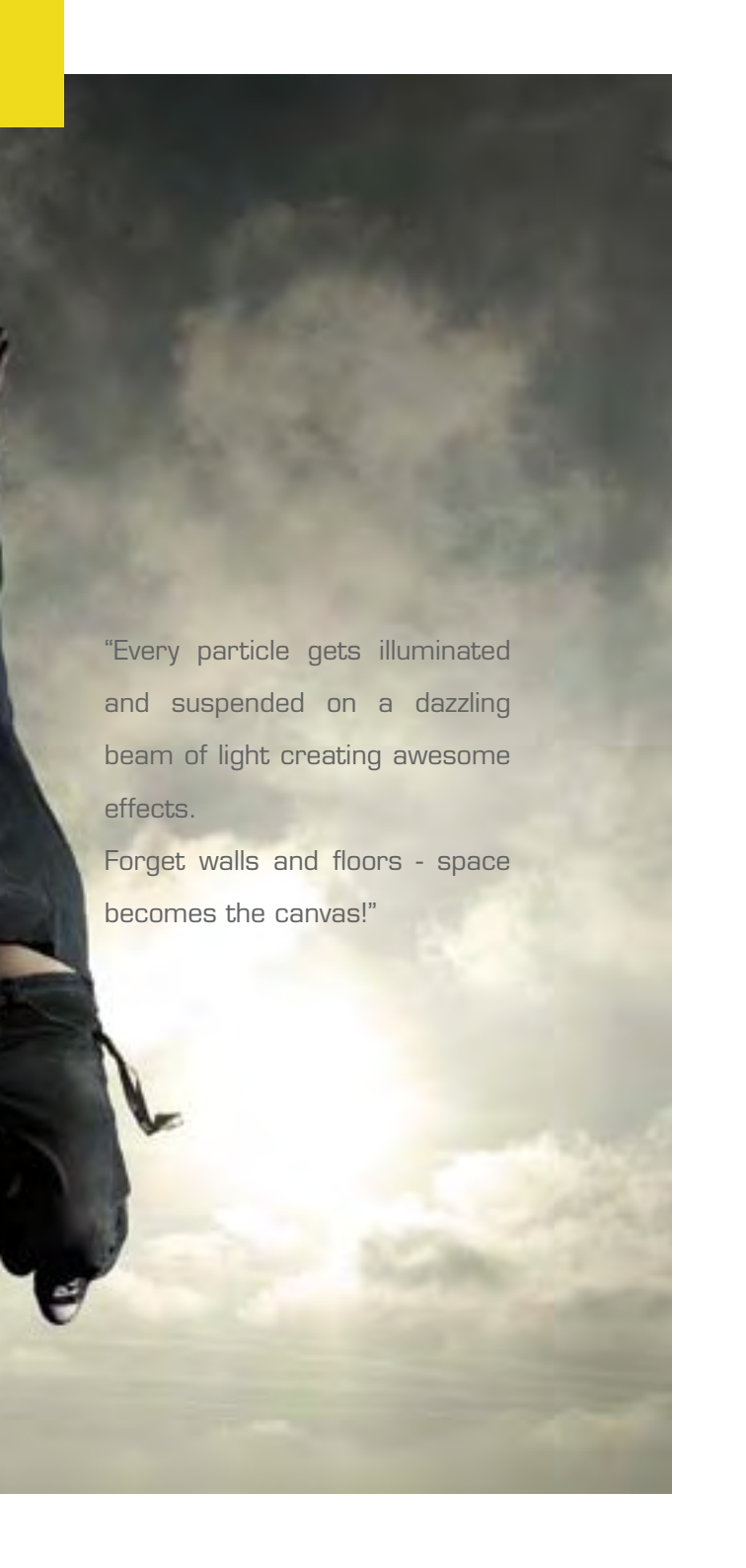
Includes:

- 2 x Fog Heads
- 1 x Service Module
- 1 x Remote Control
- 2 x 3 pin XLR Leads
- 2 x 10 meter 6mm Fluid Lines
- 2 x drip trays

ACCESSORIES

- 6mm Fluid Line (by meter)
- AF-1 fan
(#92615000, 230V)
(#92615100, 115V)



A person wearing a dark jumpsuit is floating in a sky filled with soft, white clouds. A bright, glowing light source, possibly the sun, is visible in the lower center of the frame, creating a lens flare effect. The person's legs are visible, and they appear to be in a relaxed, floating position. The overall atmosphere is dreamlike and ethereal.

“Every particle gets illuminated
and suspended on a dazzling
beam of light creating awesome
effects.

Forget walls and floors - space
becomes the canvas!”

MAGNUM 2000

#92228000, 230V

#92228100, 110V

Dubbed the “King of Portable Fog Machines,” no other portable fogger can match the output of the Magnum 2000. Its solid reliability and quality operation has made the Magnum 2000 the most specified fog machine in the world.

High fog output creates an instant cloud of dense fog, perfect for generating immediate dance floor atmosphere and ideal for mid-air lighting effects. The Magnum 2000 is ideal for clubs of all sizes and roadshow DJs. And the large on-board fluid capacity of 9.5 liters means less need for mid-evening refills.

The Magnum 2000 offers a host of well-conceived features such as totally variable smoke output and pressure control as well as an optional DMX interface allowing convenient control from the lighting desk. It comes complete with a truss mounting bracket for easy installation.



Magnum 2000	
HEAT EXCHANGER	<ul style="list-style-type: none">• 1,600W• Heat-up Time: 8 minutes• Overheat Protection: electro-mechanical device
EFFECT COVERAGE	<ul style="list-style-type: none">• 700 cubic meters/min
CONTROL	<ul style="list-style-type: none">• Remote control: Programming and manual operation• Remote connections: 3 pin XLR
ELECTRICAL	<ul style="list-style-type: none">• Power consumption: 7.5A @ 220V 14.1A @ 110V
MEASUREMENTS	<ul style="list-style-type: none">• Size: (LxWxH): 695 x 356 x 325 mm (27.4 x 14.0 x 12.8 in)• Weight: 13 kg (28.5 lbs)
FLUID SYSTEM	<ul style="list-style-type: none">• Fluid capacity: 9.5 liter bottle• Fluid consumption: 95 ml/min
RECOMMENDED FLUIDS	<ul style="list-style-type: none">• Check Fog Fluid Matrix, page 34-35
ACCESSORIES	<ul style="list-style-type: none">• DMX Interface (#90758020)• AF-1 fan (#92615000, 230V) (#92615100, 115V)• Ducting System (#92625006)

MAGNUM 1500

#91120000, 230V

#91120100, 110V

The new Magnum 1500 is an impressively powerful fog generator housed in the smart, sturdy compact casing of the Mania family.

With state of the art digital electronics, the Magnum 1500 is powered by a 1,200W heater, giving it a massive output, while a 2.3 liter onboard fog-fluid container provides the capacity for long running.

A remote with a 5 meter cable controls variable output and features a timer function for greater effect regulation.

The Magnum 1500 comes with a flying bracket as standard and the innovative ability to flip the onboard fog fluid container, allowing multiple flying options.



Magnum 1500

- 1,000W (US), 1,200W (EU)
- Heat-up Time: 7 minutes
- Overheat Protection: DTPD (Direct Thermal Protection Device)
- 500 cubic meters/min
- Remote Socket: RJ45
- Analogue Link: RJ45
- Remote Cable: CAT.5 (RJ45)
- Power consumption: 4A @ 240V
8A @ 110V
- Size: (LxWxH): 500 x 225 x 165 mm
(19.7 x 8.9 x 6.5 in)
- Weight: 11 kg (24 lbs)
- Fluid capacity: 2.3 liter container
- Fluid consumption: 75 ml/min
- Check Fog Fluid Matrix, page 34-35
- DMX Interface (#91612000)

MAGNUM 800

#92220000, 230V

#92220001, 115V

Dance clubs and discos the world over greatly appreciate this industry workhorse. This reliable yet compact fog machine delivers a non-stop intense cover of fog for instant atmosphere generation – a must for any mobile DJ or small club.

Easy to operate with a convenient carrying handle and portable design, the Magnum 800 uses the same high technology standards found in the larger Magnum 2000.

The Magnum 800 is tough and rugged, the perfect fogger for small nightclubs, mobile DJs and bands. It is also a useful fogger for parties and celebrations.



Magnum 800	
HEAT EXCHANGER	<ul style="list-style-type: none">• 750W• Heat-up Time: 7 minutes• Overheat Protection: Direct Thermal Protection Device
EFFECT COVERAGE	<ul style="list-style-type: none">• 200 cubic meters/min• Operational time: Continuous (at lower output)
CONTROL	<ul style="list-style-type: none">• Hand-held auto timer with fog level control• Remote Connections: 5 pin DIN
ELECTRICAL	<ul style="list-style-type: none">• Power consumption: 3.5A @ 220V 7.5A @ 110V
MEASUREMENTS	<ul style="list-style-type: none">• Size: (LxWxH): 410 x 165 x 170 mm (16.1 x 6.5 x 6.7 in)• Weight: 6.5 kg (14.3 lbs)
FLUID SYSTEM	<ul style="list-style-type: none">• Fluid capacity: 1 liter container• Fluid consumption: 50 ml/min
RECOMMENDED FLUIDS	<ul style="list-style-type: none">• Check Fog Fluid Matrix, page 34-35
ACCESSORIES	<ul style="list-style-type: none">• Accepts the standard ZR ducting system (#92625004)• DMX Interface (#92765015)

MAGNUM 550

#92228610, 240V

#92228710, 120V

The Magnum 550 Fog Machine provides the DJ with a perfect boost of dense white fog to enhance every light effect.

Its fast heat-up time and extended operational period make the Magnum 550 the clear leader in its class. Housing a 600-watt ECO-Mass Vaporizing System for economical and even distribution of haze, and supplied with a remote control, the Magnum 550 will give many years of maintenance-free operation.

The 550 is fitted with the same high quality protection as the Magnum 2000 providing an economical solution with absolutely no compromise.

Built tough with a rugged chassis, the Magnum 550 is perfect for the mobile DJ and more grinding environments.



Magnum 550

- 600W
- Heat-up Time: 7 minutes
- Overheat Protection
- 160 cubic meters/min
- Activation button
- Red LED for heater status
- Connection: via IEC socket
- Power consumption: 2.72A @ 220V
5.5A @ 110V
- Size: (LxWxH): 310 x 215 x 130 mm
(12.2 x 8.5 x 5.1 in)
- Weight: 4.6 kg (10.12 lbs)
- Fluid capacity: 1 liter container
- Fluid consumption: 23 ml/min
- Check Fog Fluid Matrix, page 34-35

FOG FLUIDS

Jem offers the widest and most popular range of atmosphere generating fog, haze and heavy fog fluid around. Ideal for use in theatres, discos, clubs, concerts, festivals and even television applications, our fluid is effective, safe and economical. All fluids are environmentally friendly and water based. They are made from the highest quality food grade polyfunctional alcohols which are diluted with water and purified by double reverse osmosis and an ultra-violet filtration process. This guarantees a virtually mineral and bacteria free product.

We want you to be totally satisfied with your fog machine. Only by using our fluid can you be 100% guaranteed that your fog machine will operate optimally. Possible problems, including a shortened machine life and possible health risk may occur with the use of any other type of fog fluid.

The efficiency and quality of the fluids have been greatly enhanced since the opening of our new fluid production facility in Lincolnshire, England. A fully automated and programmable mixing and pouring system has been installed in a virtually sterile environment that guarantees a pure, precise product. This new facility will effectively increase the production of our fluids while ensuring high quality and safety standards.

We make the finest range of fog fluids in the world. The reliability of fog machines and your good health are important to us.



HAZE

Pro Haze fluid

Specially formulated for the range of hazers including ZR 24/7 and Magnum Hazer, this fluid is also ideal for use with the Roadie X-Stream when in Haze mode. A fine optically transparent airborne medium is produced with a light to medium index of refraction - ideal for beam projection.

Available in 4 x 2.5L, 9.5L, 25L, 220L, 4 x 1 US gall. and 2.5 US gall. containers.

FOG

i-fog

i-fog is not only kind to your lights, but is also more economical to use thanks to its incredible long "hang time" characteristics. In environments unaffected by extraction and air-conditioning, i-fog can be expected to last 30% longer. In fact it is essential that all auto-timer programmed foggers be adjusted to lower output, shorter duration and longer delays in repeat firing, to avoid atmospheric saturation.

Available in 4 x 5L, 9.5L and 220L containers.

Pro Smoke Super (ZR mix)

This industry standard fluid is the automatic choice of most users. A dense white airborne fog is produced with a medium length dispersal time. Its medium to high index of refraction makes this formula ideal for all effects.

Available in 4 x 1L (party pack), 4 x 5L, 9.5L, 25L, 220L, 4 x 1 US gall., 2.5 US gall. containers.

Pro Smoke Studio (DX mix)

In a studio or theatre environment, a lighter, faster dispersing fog is often preferred. Pro-Smoke Studio offers a less dense environment to Pro-Smoke Super and is therefore less likely to interfere with TV camera focusing.

Available in 4 x 5L, 9.5L, 220L, 4 x 1 US gall. and 2.5 US gall. containers.

Pro Smoke High Density (SP mix)

The SP mix generates a high density, white, airborne fog with a very high index of refraction and slower evaporation rate. It is well suited for scenic obscuring and strobes "white-out".

Available in 4 x 5L, 9.5L, 220L, 4 x 1 US gall. and 2.5 US gall. containers.

Regular DJ fluid (DJ mix)

This specially formulated economy mix is perfect for medium density, airborne fog effects. It is particularly well suited for the Magnum 550 and 800.

Available in 4 x 5L, 9.5L, 220L and 4 x 5 US gall. containers.

HEAVY FOG

Heavy fog fluid (B2 mix)















This specially made fluid produces a dense ground-hugging effect which will disperse and evaporate before any visible rising. B2 is ideally suited for dramatic scenes involving a lot of stage activity or dance.

Available in 4 x 5L, 25L and 220L containers.

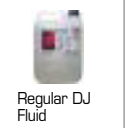
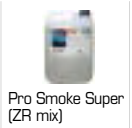
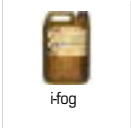
Heavy fog fluid (C3 mix)

A longer lasting, higher density fog is sometimes required in a more controlled environment. With its longer "hang time", C3 Mix is ideal for "waterfall" and "curtain" type effects.

Available in 4 x 5L and 220L containers.

FOG FLUID MATRIX		HAZE	HEAVY FOG		
		 Pro Haze Fluid	 B2 mix	 C3 mix	
JEM	 GLACIATOR X-STREAM				
	 ZR24/7 HAZER	Temperature: HOT = Lo			
	 ROADIE X-STREAM				
	 HYDRA				
	 ZR33 HI-MASS				
	 ZR12 DMX				
	 ZR12 AL				
MARTIN MAGNUM	 MAGNUM HAZER				
	 MAGNUM CLUB SMOKE				
	 MAGNUM 2000				
	 MAGNUM 1500				
	 MAGNUM 800				
	 MAGNUM 550				

FOG



Temperature:
HOT = Hi

Temperature:
HOT = nor

AF-1 & AF-2

(AF1) #92615000, 230V

(AF1) #92615100, 115V

(AF2) #92615300, 230V

(AF2) #92615400, 115V

The AF-1 and AF-2 are compact but powerful fans designed with clubs, studios, Theatres and touring applications in mind. They feature DMX input as standard and can be installed on a ceiling, in a truss or can be floor standing. They can be used alone or as part of a complete fog system by linking with other Jem machines using the analogue link (AF-1) or DMX.

Both fan units incorporate a very high quality scaled fan motor to withstand high condensation levels associated with close proximity fog.

The AF-2 is constructed from mainly aluminium sheet for minimal weight. However, without compromising ruggedness. If you want extra protection for the AF-2 the accessory Touring Frame is available. This at the same time acts as a floor stand, and adds the ability to mount the remote control.



AF-1

MAX AIRFLOW

- 1,600 cubic meters/hr
- 2,500 rpm motor

CONTROL OPTIONS

- DMX 512 (3-pin)
- Jem fan controller with auto timer, 8X mode and speed controls
- Jem Analogue Link

MEASUREMENTS

- Size: (L x W x H)
320 x 350 x 180 mm
(12.6 x 13.8 x 7.1 in)
- Weight: 10kg (22 lbs)

AF-2

MAX AIRFLOW

- 6,500 cubic meters/hr
- 1,380 rpm motor

CONTROL OPTIONS

- DMX 512 (3+5 pin)
- Jem fan controller with timer, 8X mode and speed controls

MEASUREMENTS

- Size: (L x W x H)
682 x 707 x 318 mm
(26.9 x 27.8 x 12.5 in)
- Weight: 17kg (37.4 lbs)

ACCESSORIES

- Touring frame with floor stand (#92620006)

ACCESSORIES

A comprehensive range of accessories is available to enhance the capabilities of our fog and haze generators. Every installation, theatrical production or staged event has specific requirements and Jem accessories help to tailor our standard range of machines for these special applications.

Our fog and haze machines are designed to give long reliable service. However, it is quite conceivable that your requirements might change and when they do, many of yesterday's models can be simply upgraded for today's needs.



DUCTING SYSTEM

The Jem range of Ducting Systems are designed for use when the fog needs to be distributed to less accessible locations. The wide diameter ducting will minimize condensation and maximize fog flow. Please seek the advice of your Jem representative for ducting runs longer than 5 meters.

- ZR Ducting System - includes ducting adapter and 5m of 104mm diameter ducting. Suitable for models Fogger Mk3, ZR20, ZR31, ZR41, Magnum 800 Techno Fog.
- ZR22/33 Ducting System - includes ducting adapter and 5m of 104mm diameter ducting. Suitable for models Sharky, Magnum 550, FX2, ZR12, Club Smoke System, ZR22, ZR33.
- Glaciator Twin Ducting System - includes twin outlet ducting adapter, fixings and 2 x 5m of 150mm diameter ducting. Suitable for any Glaciator Heavy Fog Machine.

ADAPTERS ONLY

Certain adapters from ducting systems are available separately for users who prefer to connect their own specification ducting to a Jem fog machine.

- ZR Ducting Adapter
- ZR22/33 Ducting Adapter
- Magnum 2000 Ducting Adapter

DRIP TRAYS

All installers of night club fogging systems will appreciate this useful accessory. The slim line tray simply attaches to the front edge of the fog machine and is designed to catch any small drops of condensation, which typically form around the fog output nozzle.

The tray is fitted with a highly absorbent material, which will dry out automatically thanks to the heat transfer from the machines' vaporizing chamber.

MAGNUM CLUB SMOKE ACCESSORIES

The Magnum Club Smoke is supplied with the accessories needed to get you started. However it may be necessary to extend fluid lines or add extra Fog Heads. A full range of fluid line connectors is available to meet the varying challenges of club installations.

All fittings are of a "push-in" type and require no tools.

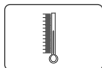
- 6mm Nylon Fluid Line (Sold per meter)
- 6mm to 6mm Push-in Connectors (for joining lengths of 6mm fluid line)
- 6mm "T" Connector (for splitting fluid supply to an additional (Fog Head)

DMX INTERFACE

The Jem range of DMX Interfaces allow you to upgrade most models of Fog and Haze Machines from Analogue control (standard fog machine controller) to accepting a control signal from a DMX Source.

- DMX Interface for Magnum 2000
- DMX Interface for ZR12AL and Magnum 800

EFFECTOLOGY



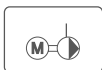
Direct Thermal Protection Device (DTPD)

- This small yet crucial component is the last line of defense against catastrophic failure. Other manufacturers still depend on cheap plastic whereas DTPD is made from a solid ceramic composite. This guarantees extremely precise overheat monitoring and is unaffected by ambient temperature changes.



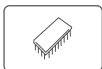
Electronic Low Fluid Cut-off System

- This technology is fitted to all machines designed for continuous operation. To eliminate the risk of running dry and burning out the pump, this unique electronic sensing system will automatically shut off the machine, protecting all major components.



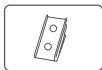
Sequential Pump System

- Because haze generators generally run continuously, heavy demands are placed in the pump. The Pump System increases the life of the machine through a dedicated "haze" pump circuit which pulses the pump at full output thus producing the ideal output and keeping the pump cool.



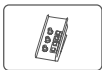
Electronic Pump Ramping (EPR)

- We were the original pioneers of EPR, an intelligent means of warning of a drop in temperature which could result in "wet smoke" (residue). The pumps respond to this signal by running slower and pumping less fluid, thus allowing the heaters to restore optimum operational temperature. This guarantees a continuous flow of smoke using highly efficient, lower wattage heaters.



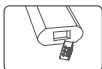
Compact Timer Remote

- Our hand-held remotes are safe, user friendly, low voltage remotes which offer precision auto-timer and output level controls. The auto-timer is simple to set with "Fog On" adjustable between 0 and 15 seconds, while the delay period is preset at 1 minute. Once the reliable timer is engaged you are free to concentrate on the music and light.



Jem Multifunctional Remote

- This remote offers more than the usual auto timer and fog level output controls. Easily engaged, the timer gives complete adjustment for both "Fog On" and "Fog Delay" models. These timer functions can be expanded even further by engaging the unique "8X Mode" which multiplies the selected timer setting by eight.



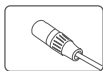
On-Board Remote System

- Greatly appreciated by rental companies, this hand-held remote can be stored during transit on-board the machine, making it easy to find at show time and eliminating transit vulnerability. But storage is not the only advantage. Portability is greatly enhanced by having on-board controls.



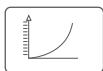
On-Board LED display

- This 3 digit LED user interface allows you full and user-friendly access to the different functions of the unit.



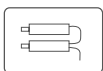
On-Board DMX

- With on-board DMX you will have access to the machine from any DMX controller or desk. All machines with on-board DMX are fitted with either 3 or 5 pin XLR plugs or in some cases both.



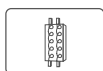
Soft Start Electronics

- The "crack" created during the initial burst of smoke is caused by the pump pressure overcoming the incredible back pressure of the heat exchanger. The unique Soft Start Electronics gradually powers the pump, eliminating this crack and ensuring a quieter and smoother operational level following initial start up.



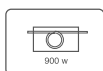
Analogue Link

- Whether you have run out of DMX channels or simply want to link two smoke machines together and operate them from a single remote, the analogue link facility is the solution. This feature even allows multi-machine connection, making operation a simple one-finger action.



D-Tec, Hi-Mass Vaporizing System

- This system produces a very high fog output using a relatively low wattage heat source. The secret is its high alluvial mass and its twin, cuprous, oval helicoils. 3.5 meter helicoils and precision casting ensure maximum heat exchange between the efficient heater and the twin fluid carrying coils.



Heat exchangers

- All Jem heat exchangers are designed for high efficiency performance. Only the purest grade LM24 aluminium is used in the production process which eliminates the risk of porosity (pockets of gas within the casting which can cause heater failure). All heat exchangers contain cuprous helicoils of at least 2.8 meters in length, ensuring a continuous flow of pure, dry, white fog.



Fluid container

- All fog, haze and heavy fog machines are designed to carry removable fluid containers of varying sizes depending on the model's application. The removable container makes for quicker refills and protects the machine from damage through spillage in transit.



Use only Jem and Martin Fluid

- All fluids are designed specifically for the range of machines. To ensure the maximum lifetime of your machine and at the same time experience the best possible effect, the right choice of fluid is essential.

For further details: www.jemsmoke.com



Jem

www.jemsmoke.com